BUREAU OF ENVIRONMENT
CONFERENCE REPORT

SUBJECT: NHDOT Monthly Natural Resource Agency Coordination Meeting
DATE OF CONFERENCE: November 15, 2017
LOCATION OF CONFERENCE: John O. Morton Building
ATTENDED BY:

NHDOT
Matt Urban
Sarah Large
Ron Crickard
Mark Hemmerlein
Marc Laurin
Don Lyford
Bill Saffian
David Scott
Meli Dube
John Sargent
Jennifer Reczek
Kathy Corliss
Matt Healey
Kevin Daigle

ACOE
Mike Hicks

EPA
Mark Kern

NHDES
Gino Infascelli
Lori Sommer

NHF&G
Carol Henderson
John Magee

NH Natural Heritage Bureau
Amy Lamb

Consultants/Public Participants
Christine Perron

(When viewing these minutes online, click on an attendee to send an e-mail)

PRESENTATIONS/ PROJECTS REVIEWED THIS MONTH:
(minutes on subsequent pages)

(When viewing these minutes online, click on a project to zoom to the minutes for that project)

NOTES ON CONFERENCE:

Finalization of the September 20, 2017 Meeting Minutes. Postpone the finalization of the October 18th, 2017 Meeting Minutes.
Matt Urban ask the group if there were any other comments or edits for the September 20, 2017 meeting minutes. We had received comments from Marc Laurin and Vicki Chase that have been incorporated. No other edits or comment were presented at the meeting. Sarah Large finalized and posted the September minutes subsequent to the October meeting.

Matt Urban asked the group if it would be ok to postpone the finalization of the October 18, 2017 meeting minutes as the draft minutes had only been out for a week. The group agreed to postpone the finalization of minutes to December.

Hinsdale-Brattleboro, #12210C (A004(152))
Bill Saffian provided an update on the status of the project. The project was reviewed at this meeting in 1998 and 2009, at which time VTrans was taking the lead for development of the Environmental Assessment (EA). The EA was completed by a VTrans consultant in December 2013. Since that time, a Project Advisory Committee was created and has met four times. All meeting minutes are available on the DOT website. Public Informational Meetings were held in September in both VT and NH.

The purpose of the meeting today is to provide an update on the selected alternative and to start getting input on specific resource and permitting concerns. A Public Hearing is tentatively planned for January. Final design of the project is underway. Impacts will be finalized after the Public Hearing and permit applications will be submitted summer 2018. The project is currently scheduled to advertise in September 2019, with construction beginning in 2020.

B. Saffian described the proposed alternative. The new bridge will carry NH Route 119 over the Connecticut River approximately 1,000' south of the two existing bridges that currently carry this route over the river. The new crossing will be an 8-span steel multi-girder bridge with an overall length of 1,782'. The bridge will carry two travel lanes and two 8' shoulders across much of its length, with an overall width of 49.5'. As the bridge approaches the Vermont side of the river, its width will increase to 53.5' to accommodate a turning lane. The profile of the bridge will rise up from Vermont at 1.5% for 1,100', and will then go down at 1.0% to the New Hampshire side. The profile of the new bridge will be over 30' higher than the existing bridges. Clearance under the bridge will be 43' to 46' to the normal water elevation (El. 220) across much of the channel. The bridge will have solid wall piers with concrete foundations built on piles. Tremie seal methodology will be used so that foundation and pier concrete can be poured in the dry within the cofferdams. Access for construction is anticipated to be from a trestle located on the upstream side of the proposed bridge, which extends from the NH bank to the last in-water pier near the VT bank.

Christine Perron provided an initial overview of resource considerations to be addressed as the project progresses. McFarland Johnson will be coordinating all NH and VT permitting for the project, and providing design guidance to NHDOT on VT stormwater design.

This section of the river is listed as impaired by aluminum and copper. Existing and proposed impervious surface areas have not yet been calculated. Treatment will be provided on both sides of the river. Locations for treatment areas will be shown on Hearing plans, but design of these areas will not be completed until early 2018. One design element currently under review is drainage across the bridge. B. Saffian provided a hand out based on 10-year storm calculations that shows how runoff is accumulating from the highpoint on the bridge back toward the VT and NH abutments. This graphic identified points

where the runoff begins to infringe beyond the shoulders and into the travelways. The maximum intrusion occurs in the vicinity of the intersection of proposed NH 119 and VT 142 where, due to the reduction in shoulder width required to provide an additional turning lane, infringement into the travel lane is just over half the lane width. While design guidance allows infringement into the travelway for up to half a lane width, the Department would like to remove the ponding water to prevent this from happening. There are two options that would address this concern: open scuppers along the bridge, which would allow the water to fall directly to the ground/river below, or a closed scupper drainage system, which would carry the water to a discharge point. At this early stage of drainage design, the Department would like to determine if the resource agencies would be willing to consider a site balancing approach to treatment, with open scuppers on the bridge and "over treatment" elsewhere on the project to provide a net benefit to water quality. This approach is being used on the Lebanon-Hartford Interstate 89 bridge project. It was agreed that this approach could be presented for consideration with more details. Mark Kern commented that he would like to see more information on the degree to which transportation is influencing the existing impairments. If roadway runoff is playing a trivial role in aluminum and copper in the river, then he would be open to considering open scuppers.

The wetland delineation will be updated this fall and preliminary impacts will be presented in the near future. At this time, it is not known whether the project will exceed the Army Corps thresholds that would trigger the need for an Individual Permit. However, if impacts are below these thresholds for both states, it is hoped that the project could be authorized under each state's General Permit. In 2005, the US Coast Guard determined that a bridge permit would not be needed for the project. The Coast Guard will be contacted to confirm that this determination still applies. If a bridge permit is not needed, then the only trigger for a Water Quality Certificate would be the Army Corps Individual Permit. Mike Hicks commented that the Army Corps would be looking at the thresholds for each state, as well as other factors such as water quality and floodplains. If it is determined that the project can be authorized under the General Permit, it would fall under General Permit 8 in the New Hampshire General Permit. He further noted that he had flexibility regarding any time of year restrictions noted in the General Permit and would defer to the recommendations of DES and NH Fish and Game.

M. Hicks asked about historic resource concerns. C. Perron replied that historic resources were addressed in the EA.

Additional resource considerations were discussed. The river is a regulatory floodway. The Department is completing a hydraulic study to determine if the project will impact the base flood elevation. Impacts to adjacent floodplain will also be determined. C. Perron asked if riprap is proposed around the new piers. B. Saffian replied that riprap is not proposed.

The EA identified several State-listed rare plants in the vicinity of the project, including knotty pondweed and water stargrass in NH. A field survey in 2005 identified stargrass in the project area. C. Perron will be requesting an updated NHB database review in the near future. It is assumed that another rare plant survey will be needed. Amy Lamb noted that a third rare plant was found near the project area in 2012 and would be included in her updated memo. She also asked that the project consider impacts to rare plants from stormwater runoff.

Federally-listed species of concern are northern long-eared bat and dwarf wedgemussel. Tree clearing is anticipated. All clearing will be within 300' of existing pavement; however, the total amount of clearing has not been finalized. The project is expected to qualify under the Programmatic Consultation for northern long-eared bat. A dive survey for dwarf wedgemussels was completed in 1999, and a shoreline survey was completed in 2009. No dwarf wedgemussels were found during either survey. C. Perron will be confirming with USFWS that there are still no concerns with this species.

Consultation on Essential Fish Habitat is no longer required for Atlantic salmon in the Connecticut River. Input on State fisheries concerns is needed from NH Fish & Game and VT Fish & Wildlife, especially regarding the desire for any time of year restrictions. The duration of construction may be up to 4 years, and any restrictions on in-water work due to concerns with disturbance, noise, or vibrations could extend this duration further and would need to be identified as soon as possible. Carol Henderson said that she would follow up with C. Perron regarding potential concerns.

C. Henderson noted that the project should consider impacts to bald eagles, primarily from tree clearing.

C. Henderson commented that the project will eliminate vehicular access to the NH Fish & Game boat launch located on the island in the river, and she asked how this would be addressed. Don Lyford noted that the current access to the boat launch is very rough for vehicles. Ownership and maintenance of the boat launch needs to be confirmed. If it is determined that the boat launch is actively used, the enhancement of another boat launch downstream could be investigated. C. Henderson noted that NH Fish & Game would like to promote boat access where possible.

This project has been previously discussed at the 1/22/1998 and 5/20/2009 Monthly Natural Resource Agency Coordination Meetings.

Alstead, #20817 (X-A002(091))

John Sargent, NHDOT Bureau of Bridge Design, gave an overview of proposed project, which will replace the existing bridge carrying NH Route 123A over Warren Brook in Alstead just east of the junction with the Cold River. The original concrete T-beam structure was constructed in 1935 with upgrades in the 1970s. This bridge withstood the major flood event in 2005, which significantly altered the stream characteristics upstream of the crossing. Repairs to the abutments and wing walls were made in 2007. The existing bridge measures 23 feet from face of abutment to face of abutment with a 170 square foot opening. The proposed design measures 57 feet from face of abutment to face of abutment with a 275 square foot opening. There is an existing concrete pad connecting the abutments, which will be removed and replaced with natural stream bottom material. Because the new abutments will be pulled back above the top of bank, stone fill will be placed in the area where the abutments and roadway fill currently exist to protect the new abutments and armor the slope of the new bank, which will be graded to tie in the contours of the existing banks upstream and downstream of the crossing to create a bank connectivity through the crossing. During construction, water will be directed to one side of the crossing while work is completed on the opposite side. The proposed alternative will shift the alignment of the road and widen slightly to the east, with alternating 1-lane traffic remaining open. The widening and alignment shift is necessary due to the need to keep two T-beams intact to support vehicular traffic during construction. The Town of Alstead indicated a strong preference for keeping the road open during construction and opted for this shift-to-the-east alternative over an Accelerated Bridge Construction alternative, which would have kept the new structure almost exactly within the existing alignment but would have required closing the road.

Carol Henderson, NHFG, asked if there will be a shelf provided on the bank under the bridge for wildlife going through the crossing. J. Sargent replied that it had been discussed but that the current proposal does not specifically provide a wildlife shelf; however, the proposed bank will mimic the

condition of the bank upstream and downstream of the crossing to provide connectivity through the crossing.

C. Henderson noted that the existing concrete pad is perched at the outlet and asked if this will be repaired as part of the removal. J. Sargent indicated that the natural stream bed material will be graded to address this drop off gradually.

Mark Hemmerlein, NHDOT Bureau of Environment, asked about the roadway tie-ins. J. Sargent explained that the pavement will extend to an existing joint to the north of the project and will tie in just before the intersection with NH Route 123 to the south of the project, with an increase in impervious surface of approximately 1000 square feet.

Matt Urban, NHDOT Bureau of Environment, indicated that since we are proposing a structure size that is compliant with the stream crossing rules, creates bank connectivity under the bridge and an open natural stream bottom, we do not anticipate mitigation for this project. Lori Sommer, NHDES Wetlands Bureau, concurred that no mitigation would be necessary for the compliant structure. Gino Infascelli, NHDES Wetlands Bureau, asked for clarification on how the design meets stream crossing rules and expressed confusion that bank full width was not represented on the plans. J. Sargent, M. Urban, Bill Saffian, NHDOT Bureau of Bridge Design, and Meli Dube, NHDOT Bureau of Environment, explained that the bank full width based on the stream characteristics is 43'. Using the regional curve calculation, this requires a 54' span structure from face of abutment to face of abutment. The proposed crossing is 57' which exceeds the length required for stream crossing rule compliance and there is no fill proposed in the streambed.

John Magee, NHFG, asked if the banks upstream and downstream are stable, noting that the banks further upstream outside of the project area are very unstable. M. Dube and J. Sargent replied that the banks are currently well vegetated and seemingly stable and showed pictures to demonstrate the current condition. J. Magee also expressed concern for higher velocities, such as during storms, causing scour at the outlet and suggested placing boulders downstream to serve as grade control. J. Sargent replied that normal velocities should not be high enough to cause that kind of erosion but that there are existing granite blocks in the channel immediately downstream of the concrete slab that could be moved during construction to serve as grade control instead of boulders.

M. Dube noted that the Cold River is a designated river. The Cold River Local Advisory Committee has been contacted and expressed a concern for a drop off at the junction of the Cold River and Warren Brook. M. Dube and J. Sargent did not observe a drop off at the actual junction of the two waterways located just west of the project area; it is assumed this drop off references the existing perch at the outlet of the concrete pad. This will be addressed during construction, as noted above.

Mike Hicks, USACOE, asked why the bridge needs to be replaced. J. Sargent explained that deterioration of the T-beams and corrosion has made continued maintenance/rehab untenable and replacement is now the best option. David Scott, NHDOT Bureau of Bridge Design, noted that this bridge is red listed, approximately #60 in the state.

M. Hicks inquired about the status of Section 106 review. M. Dube provided an update on the NEPA review, including Section 106. The project area is adjacent to the Alstead Village Historic District in the southwest quadrant, however we are not intending to impact the District and an Individual Inventory of the bridge confirmed that it is not included in the District and is not individually eligible for listing on the National Register for Historic Places so the project has been found to have no effect on historic properties by FHWA and NHDHR. Coordination with the Office of Strategic Initiatives regarding flood resources is ongoing, however, it is anticipated that the proposed design will have a positive impact on flood capacity due to the increased opening. There are no conservation lands in the vicinity of the project area. Japanese knotweed is the only invasive species, and it is common throughout the project. Appropriate BMPs will be employed during construction. Options for permanent stormwater treatment are being reviewed to treat as much of the additional runoff as possible from the proposed approximately 1000 square feet of increased impervious surface. Amy Lamb, NHNHB, confirmed that there are no known records of protected species or habitats in the project area. M. Dube stated that the project has been reviewed by the US Fish and Wildlife Service (USFWS) and is located in the range of the northern long-eared bat (NLEB). Because this project is designed to be constructed in one season, all bridge work and minor tree clearing will occur during the NLEB active season. This project meets the requirements of the FHWA/USFWS Programmatic Biological Opinion and consultation has been initiated with a May Affect, Likely to Adversely Affect finding due to the work during the active season.

This project has been previously discussed at the 1/21/2015 Monthly Natural Resource Agency Coordination Meeting.

Ellsworth, #40874 (X-A004(514))

Matt Healey, NHDOT Highway Design, provided an overview of the project area and scope, which involves paving the existing gravel travel way on Stinson Lake Road in Ellsworth. The project area begins just north of the bridge over Sucker Brook near the intersection of Ranch Road and extends northerly approximately 4200 ft, ending just past the existing turnaround north of Brown Brook bridge . This project is funded through the FHWA Federal Lands Access Program (FLAP) and was originally initiated by NHDOT Maintenance District 2. The existing gravel roadway has steep side slopes and deteriorated or undersized drainage structures in many locations and is susceptible to washouts and erosion during storm events. Additionally, this segment of Stinson Lake Road is maintained by NHDOT Maintenance crews during the winter, but the gravel segment requires a separate truck for the application of sand instead of salt which is applied on the paved roadway to the south of the project. The intent of the project is to pave the road to make winter maintenance easier and upgrade the drainage structures, ditch lines, embankment slopes and guardrail to make the roadway more stable, reduce erosion and sedimentation of nearby wetland systems, and increase safety and accessibility for the traveling public. The proposed design includes an 18’ wide paved roadway with intersecting roadway and driveway tie-ins, 1’ gravel shoulders, construction and stabilization of ditch lines, slope flattening and stabilization with rip-rap, replacement and upsizing of culverts where necessary, and replacement and extension of guardrail at the northern end of the project.

Meli Dube, NHDOT Bureau of Environment, provided an update on the NEPA review. The project area passes through the White Mountain National Forest at two locations, both of which have

existing 200' wide easements. These locations include the Three Ponds Trail Head in the middle of the project area and also the area near the Mt. Kineo Trail and Brown Brook at the northern end of the project. Coordination with US Forest Service is ongoing. Review by NHNHB indicated potential presence of two species on the State watch list, and one species that is State and Federally Threatened; none were found during a site survey and no further coordination is necessary. The USFWS IPAC tool indicated that the project is located in the range of the northern long-eared bat (NLEB). This project meets requirements for the FHWA/USFWS Programmatic Biological Opinion and the project is under consultation with a May Affect, Likely to Adversely Affect finding due to tree clearing during the active season in order to accommodate a one season construction schedule. There are several wetland systems adjacent to Stinson Lake Road throughout the project area including emergent and forested wetlands, as well as intermittent and perennial streams. There are no anticipated impacts to Sucker Brook or Brown Brook at each end of the project area.

M. Healey detailed the proposed work which will impact wetlands and the initial estimates for impact quantities. There are five major wetland impact areas including both forested and emergent classifications. The majority of the work in these areas involves slope work, shoulder leveling, culvert replacement and stabilization. There are three stream impact areas, including two intermittent streams and one perennial stream. The first stream impact involves an intermittent stream that connects two jurisdictional wetlands and flows through the existing ditch line, which is currently very shallow and is located extremely close to the driving surface within the roadway shoulder in some locations. This stream crosses under the entrance to Doetown Road. The proposed work involves formalizing and shifting the ditch over immediately adjacent to its current location with the intent to keep the stream flowing through the new ditch line. The culvert under Doetown Road will be replaced. The second stream impact area is located at Station 128+00 just north of the Three Ponds Trail Head and involves a perennial stream flowing under Stinson Lake Road through a 48" RCP. This pipe is proposed to be replaced, possibly upsized, as it is currently undersized and appears to be made up of segments which are not securely connected. This location sees frequent erosion during rain events and has existing scoured areas in need of repair. The third stream impact area involves an intermittent stream near the northern end of the project area that flows through a 15" CMP and outlets to the south of the roadway onto a very steep drop off which extends approximately 16 feet before stabilizing and returning to a normal stream channel. Treatment options include replacing the existing crosspipe and installing either a manhole with sump to drop the water down away from the road to a stone lined slope or install an "elephant trunk" end section which would extend 16' down the slope and outlet into the stabilized part of the stream.

M. Dube discussed the need for mitigation for the impacts detailed above. Estimated permanent wetland impacts total 6,220 square feet, which is less than the 10,000 square foot threshold at which mitigation is required. Lori Sommer, NHDES Wetlands Bureau, agreed that no mitigation would be necessary for the wetland impact areas. For stream impact area 1, as described above, L. Sommer agreed that each corresponding foot of ditch line relocation could be considered self-mitigating. Stream impact area 2, as described above, would meet the requirements for the Routine Roadway and Railway Maintenance Notification (RRMN) if replaced in-kind with another 48" pipe and therefore be exempt from mitigation. However, upsizing the a 60' pipe would meet stream crossing rules for Tier 1 streams and L. Sommer agreed that no mitigation would be

required for compliant structures. Stream impact area 3 also meets requirements for the RRMN if only the pipe is replaced, however, L. Sommer agreed that the severe dropoff and erosion should be considered in this repair and extending the outlet down the slope to a point where the water can be outletted safely would not require mitigation.

Mike Hicks, USACOE, warned that there may be many good NLEB roost trees in the vicinity of the project area and recommends checking with the USFS. M. Dube noted this and replied that there are currently no known roost trees.

L. Sommer indicated that she would like an opportunity to review more developed plans and x-sections for the project, including those of the channel / ditch work in the vicinity of Doe Town Rd, prior to wetland application submission to verify the mitigation agreements discussed above

This project has not been previously discussed at a Monthly Natural Resource Agency Coordination Meeting.

Conway, #11339 - Mitigation
No minutes have been submitted to date.

Discussion involved needing more information on how much of the project was constructed, how much of the permitted wetland impacts were actually impacted, and more details and a breakdown of the mitigation parcels purchased were needed to come up with a determination.

This project has been previously discussed at the 3/23/1995, 1/17/2001, 9/19/2001, 5/15/2002, 3/18/2004, 11/15/2006, 1/21/2009, 2/18/2009, 3/18/2009 Monthly Natural Resource Agency Coordination Meetings.